Lifetime exposure to rubber dusts, fumes and N-Nitrosamines and cancer mortality in a cohort of British rubber workers with 49 years follow-up

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Online Supplement. Results of simulations by cancer and agent

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A70 represent results for the main analysis where employment duration is continuous until retirement at age 70, emigration, or death

D1-10 represent results of simulations of employment durations based on a similar UK cohort^{4,5,17,32}

X-axis represents Sub Hazard Ratios (SHR) for each quartile of exposure

Exposure quartiles

Rubber dust (I: $<9.50 \text{ year mg/m}^3$; II: $9.50-16.68 \text{ year mg/m}^3$; III: $16.68-27.03 \text{ year mg/m}^3$)

Rubber fumes (I: <2.98 year mg/m 3 ; II: 2.98-5.55 year mg/m 3 ; III: 5.55-9.36 year mg/m 3 ; IV: >9.36 year mg/m 3

NSS (I: <10.03 year μ g/m³; II: 10.03-21.38 year μ g/m³; III: 21.38-442.93 year μ g/m³)

NDMA (I: $<3.12 \text{ year } \mu\text{g/m}^3$; II: $3.12-5.96 \text{ year } \mu\text{g/m}^3$; III: $5.96-9.67 \text{ year } \mu\text{g/m}^3$; IV: $>9.67 \text{ year } \mu\text{g/m}^3$)

NMor (I: <4.69 year $\mu g/m^3$; II: 4.69-9.77 year $\mu g/m^3$; III: 9.77-16.40 year $\mu g/m^3$; IV: >16.40 year $\mu g/m^3$)

BLADDER CANCER

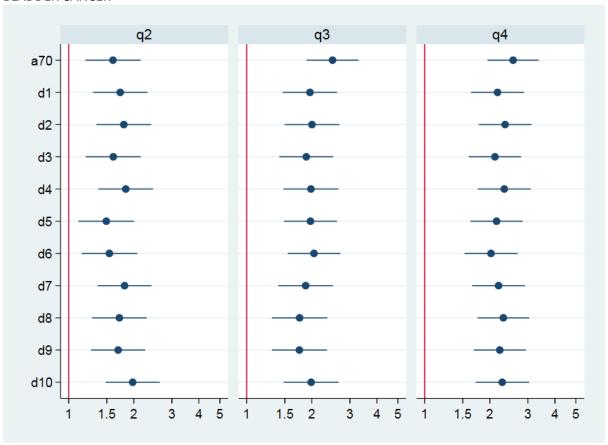


Figure 1. Sensitivity analyses of employment durations and exposure-response associations between bladder cancer mortality and lifetime cumulative exposure to rubber dust

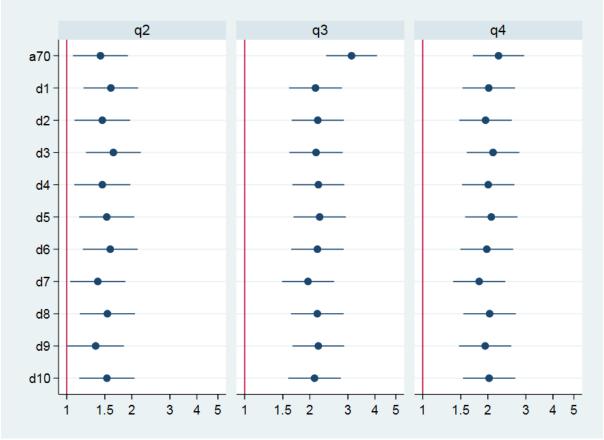


Figure 2. Sensitivity analyses of employment durations and exposure-response associations between bladder cancer mortality and lifetime cumulative exposure to rubber fumes

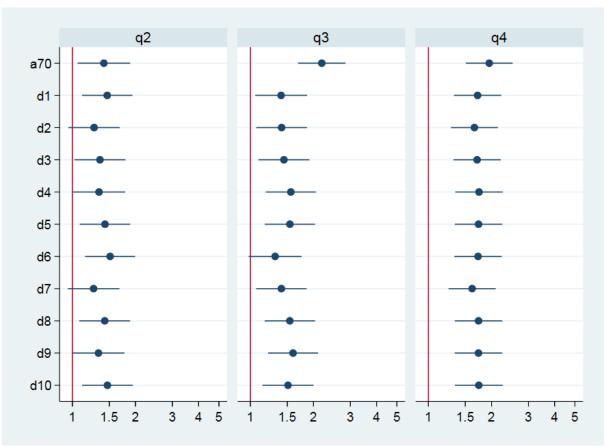


Figure 3. Sensitivity analyses of employment durations and exposure-response associations between bladder cancer mortality and lifetime cumulative exposure to N-Nitrosamines sum score

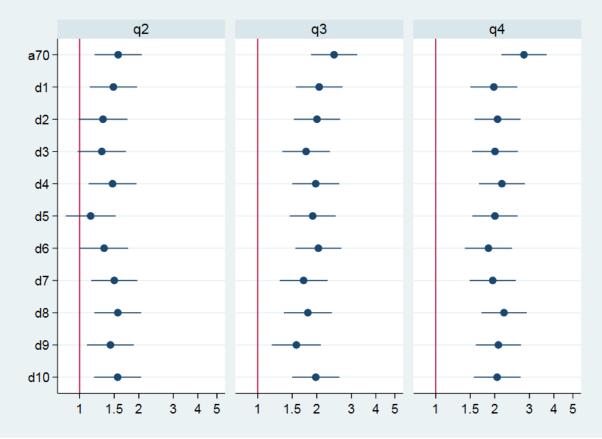


Figure 4. Sensitivity analyses of employment durations and exposure-response associations between bladder cancer mortaltiy and lifetime cumulative exposure to NDMA

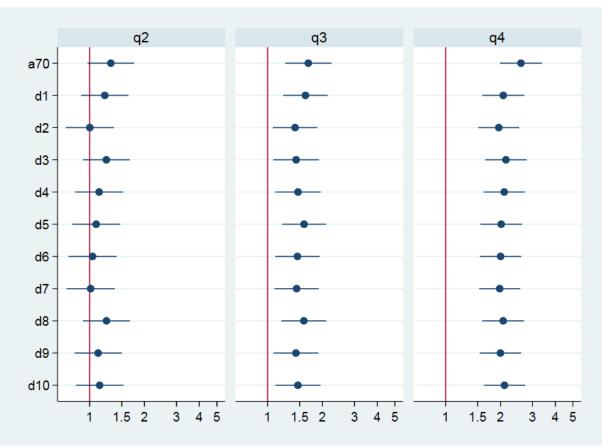


Figure 5. Sensitivity analyses of employment durations and exposure-response associations between bladder cancer mortality and lifetime cumulative exposure to NMor

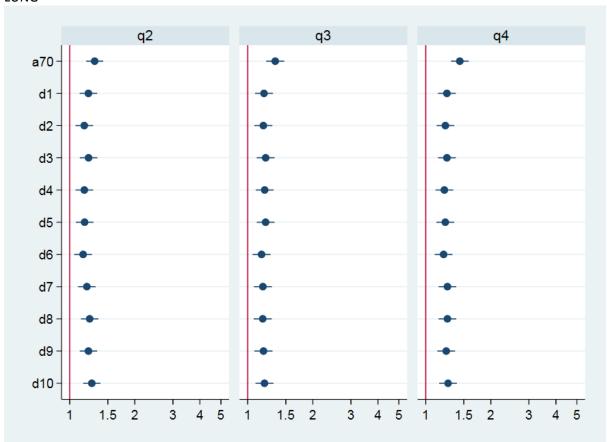


Figure 6. Sensitivity analyses of employment durations and exposure-response associations between lung cancer mortality and lifetime cumulative exposure to rubber dust

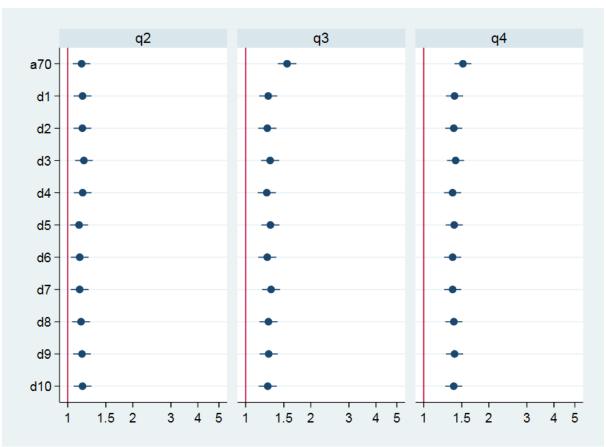


Figure 7. Sensitivity analyses of employment durations and exposure-response associations between lung cancer mortality and lifetime cumulative exposure to rubber fumes

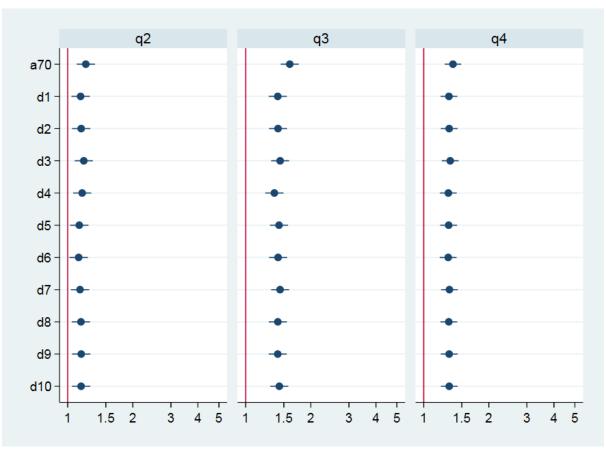


Figure 8. Sensitivity analyses of employment durations and exposure-response associations between lung cancer mortality and lifetime cumulative exposure to N-Nitrosamines sum score

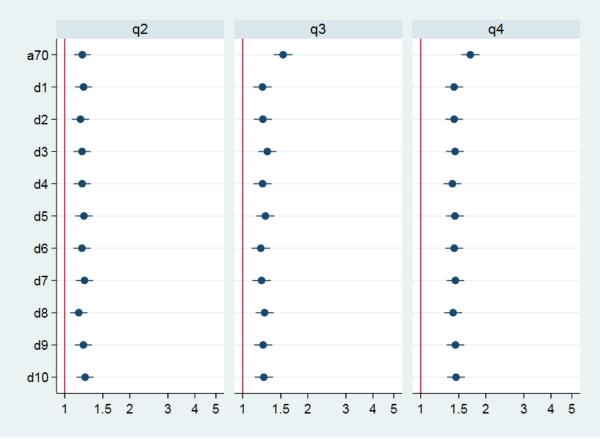


Figure 9. Sensitivity analyses of employment durations and exposure-response associations between lung cancer mortality and lifetime cumulative exposure to NDMA

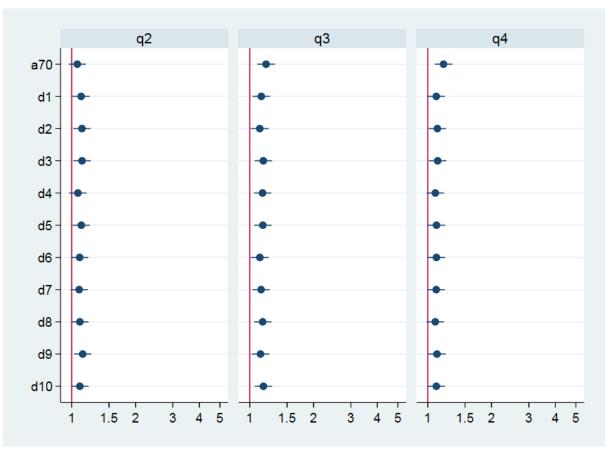


Figure 10. Sensitivity analyses of employment durations and exposure-response associations between lung cancer mortality and lifetime cumulative exposure to NMor

STOMACH

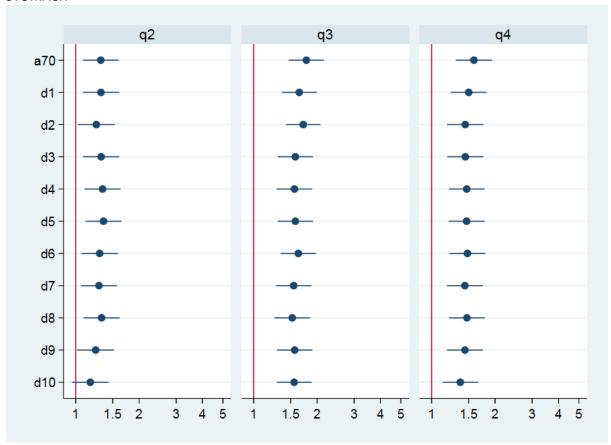


Figure 11. Sensitivity analyses of employment durations and exposure-response associations between stomach cancer mortality and lifetime cumulative exposure to rubber dust

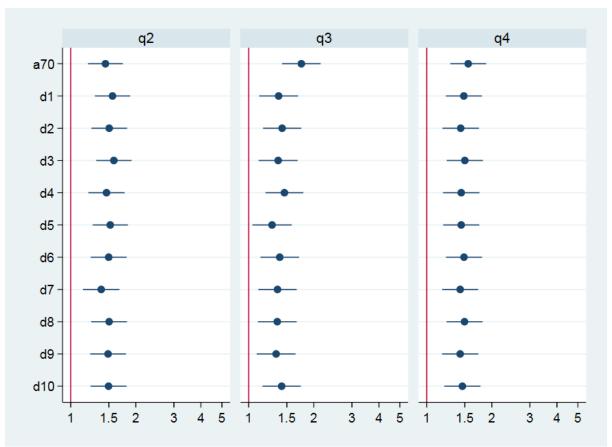


Figure 12. Sensitivity analyses of employment durations and exposure-response associations between stomach cancer mortality and lifetime cumulative exposure to rubber fumes

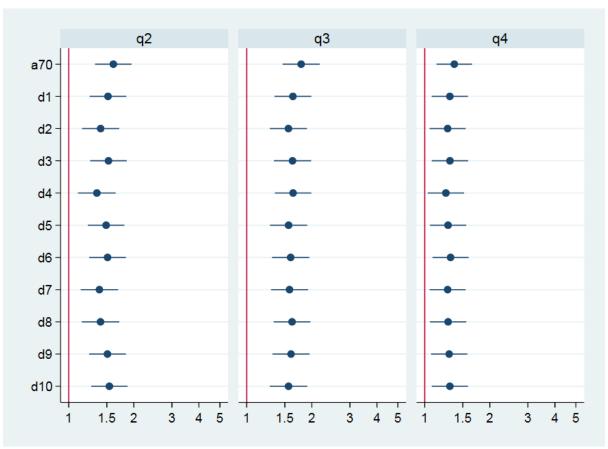


Figure 13. Sensitivity analyses of employment durations and exposure-response associations between stomach cancer mortality and lifetime cumulative exposure to N-Nitrosamines sum score

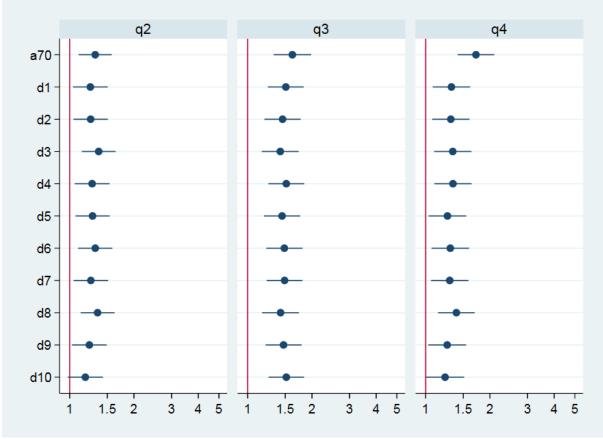


Figure 14. Sensitivity analyses of employment durations and exposure-response associations between stomach cancer mortality and lifetime cumulative exposure to NDMA

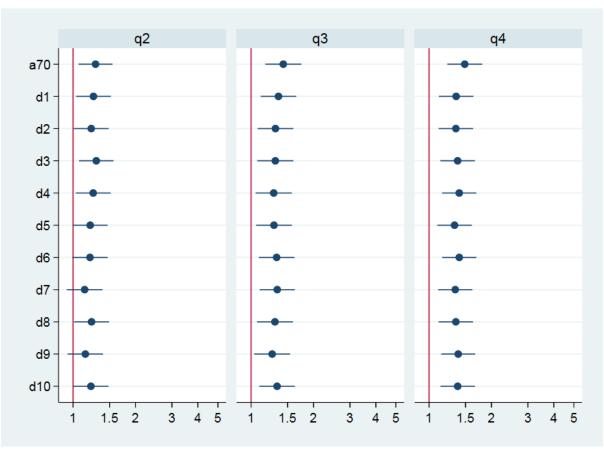


Figure 15. Sensitivity analyses of employment durations and exposure-response associations between stomach cancer mortality and lifetime cumulative exposure to NMor

MYELOMA

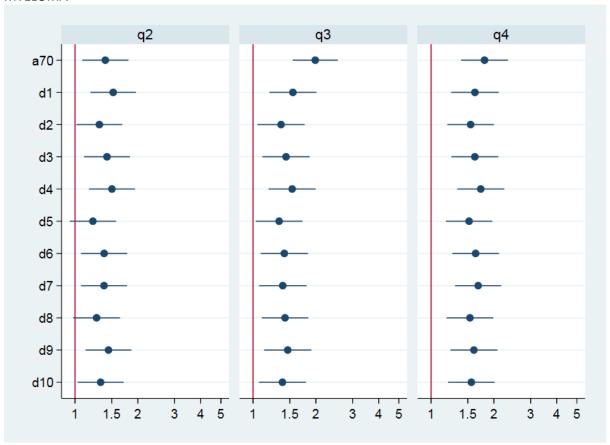


Figure 16. Sensitivity analyses of employment durations and exposure-response associations between multiple myeloma mortality and lifetime cumulative exposure to rubber dust

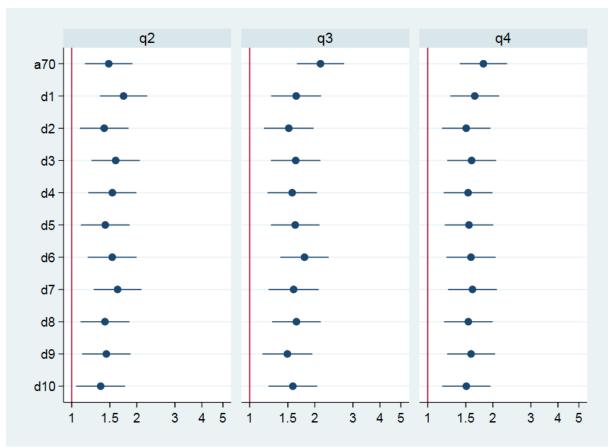


Figure 17. Sensitivity analyses of employment durations and exposure-response associations between multiple myeloma mortality and lifetime cumulative exposure to rubber fumes

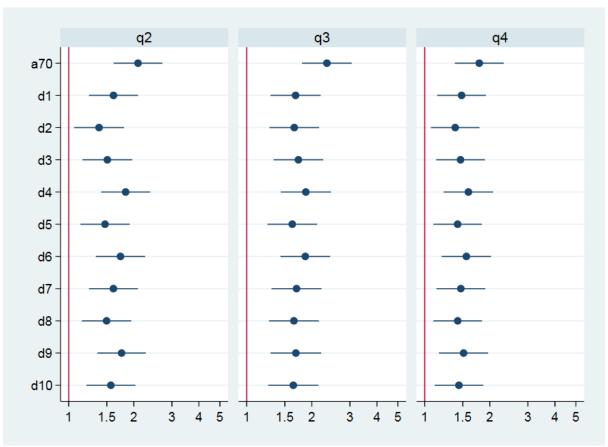


Figure 18. Sensitivity analyses of employment durations and exposure-response associations between multiple myeloma mortality and lifetime cumulative exposure to N-Nitrosamines sum score

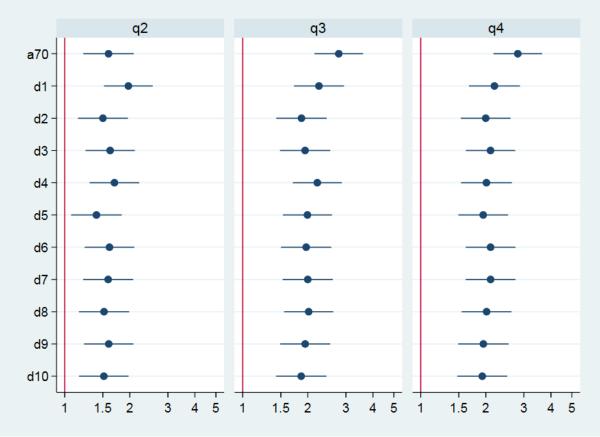


Figure 19. Sensitivity analyses of employment durations and exposure-response associations between multiple myeloma mortality and lifetime cumulative exposure to NDMA

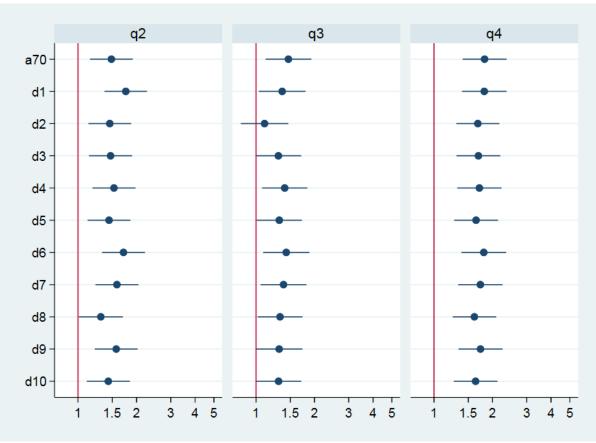


Figure 20. Sensitivity analyses of employment durations and exposure-response associations between multiple myeloma mortality and lifetime cumulative exposure to NMor

LEUKAEMIA

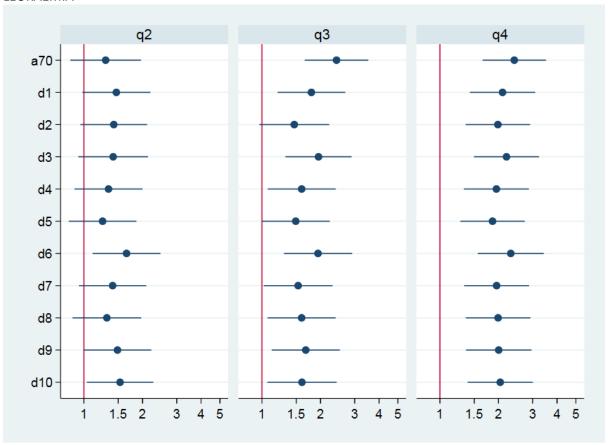


Figure 21. Sensitivity analyses of employment durations and exposure-response associations between leukaemia mortality and lifetime cumulative exposure to rubber dust

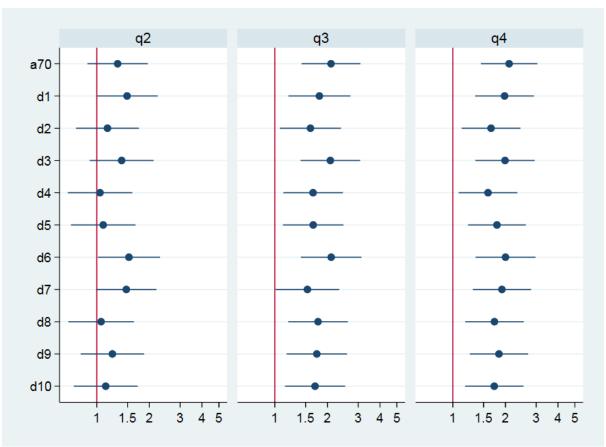


Figure 22. Sensitivity analyses of employment durations and exposure-response associations between leukaemia mortality and lifetime cumulative exposure to rubber fumes

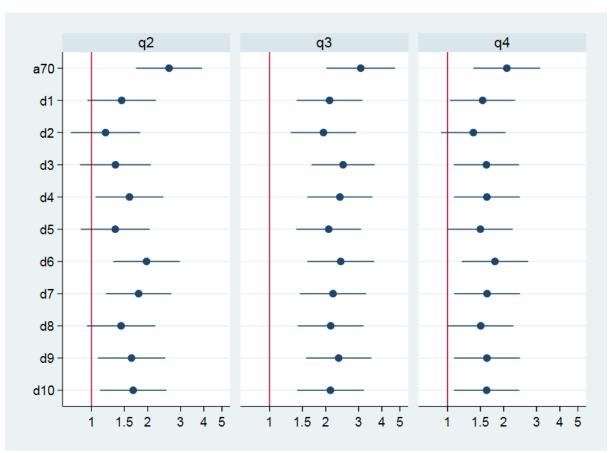


Figure 23. Sensitivity analyses of employment durations and exposure-response associations between leukaemia mortality and lifetime cumulative exposure to N-Nitrosamines

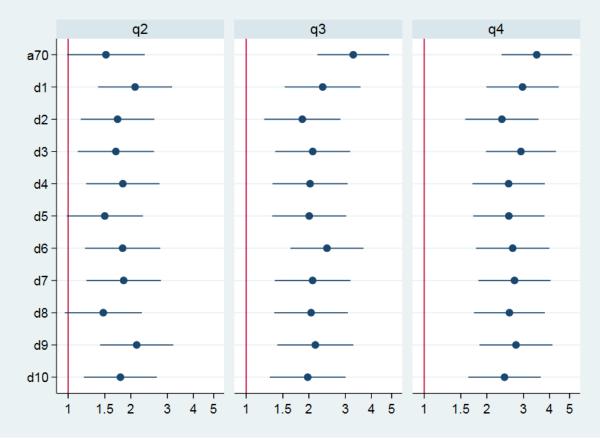


Figure 24. Sensitivity analyses of employment durations and exposure-response associations between leukaemia mortality and lifetime cumulative exposure to NDMA

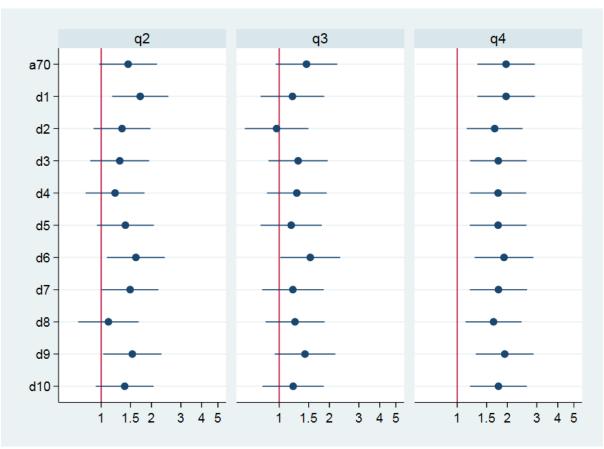


Figure 25. Sensitivity analyses of employment durations and exposure-response associations between leukaemia mortality and lifetime cumulative exposure to NMor

MALIGNANT NEOPLASMS

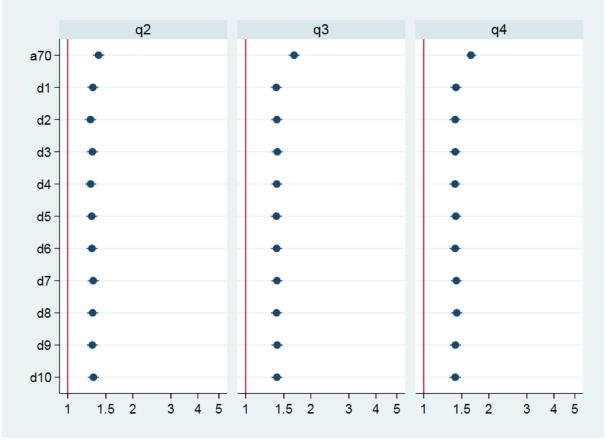


Figure 26. Sensitivity analyses of employment durations and exposure-response associations between all malignant neoplasms mortality and lifetime cumulative exposure to rubber dust

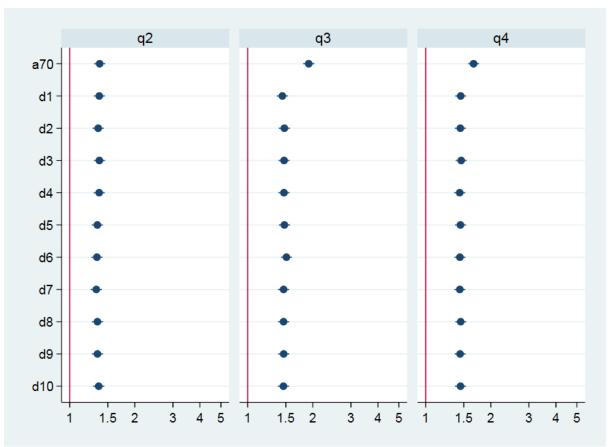


Figure 27. Sensitivity analyses of employment durations and exposure-response associations between all malignant neoplasms mortality and lifetime cumulative exposure to rubber fumes

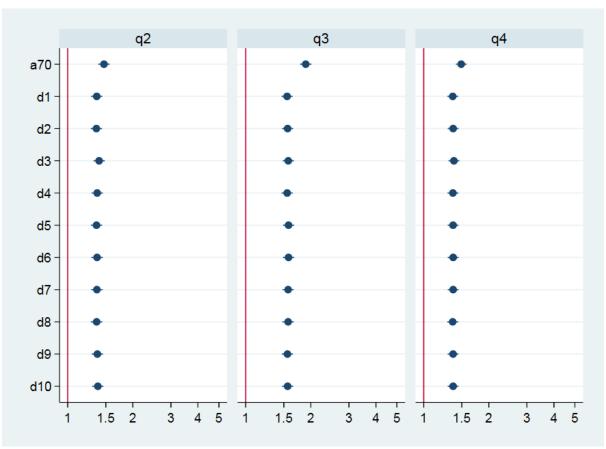


Figure 28. Sensitivity analyses of employment durations and exposure-response associations between all malignant neoplasms mortality and lifetime cumulative exposure to N-Nitrosamines sum score

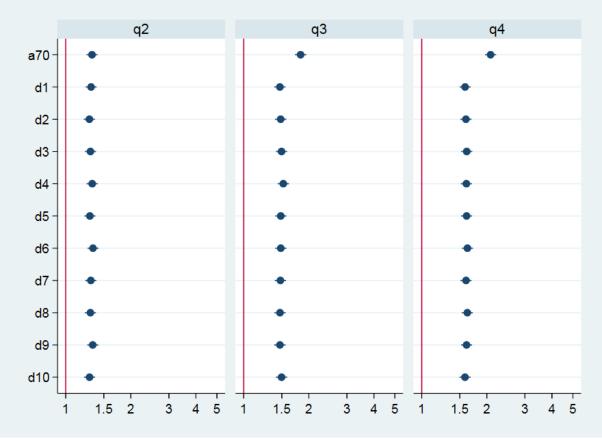


Figure 29. Sensitivity analyses of employment durations and exposure-response associations between all malignant neoplasms mortality and lifetime cumulative exposure to NDMA

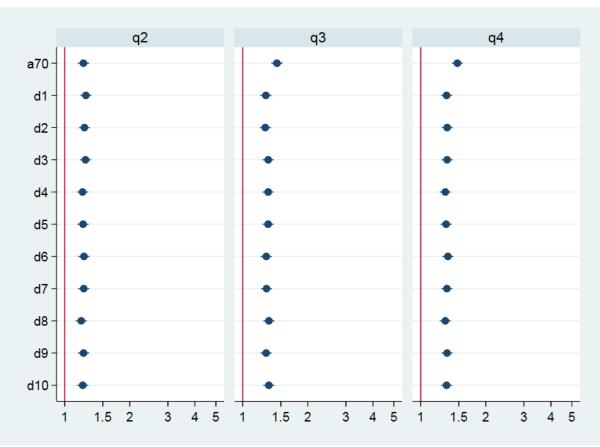


Figure 30. Sensitivity analyses of employment durations and exposure-response associations between all malignant neoplasms mortality and lifetime cumulative exposure to NMor